

**The Lane Construction Corporation  
Penobscot County  
Hermon, Maine  
A-646-71-E-R (SM)**

**Departmental  
Findings of Fact and Order  
Air Emission License**

After review of the air emission license application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

**I. REGISTRATION**

**A. Introduction**

Lane Construction Corporation (Lane), located in Hermon, Maine has applied to renew their Air Emission License, permitting the operation of their asphalt batch plant and a diesel generator.

**B. Emission Equipment**

**Asphalt Plant**

<u>Equipment</u>	<u>Process Rate (tons/hour)</u>	<u>Design Capacity</u>	<u>Firing Rate</u>	<u>Control Devices</u>	<u>Stack ID</u>	<u>Date of Manufacture</u>
Drum Mix	200	86 MMBtu/hr	614 gal/hr, #2 fuel oil (0.5% sulfur maximum), #4 fuel oil (0.5% sulfur maximum) and specification waste oil , (0.7% sulfur maximum)	baghouse	50	Pre 1973

Lane also operates a Hot Oil Heater with a heat input of 0.84 MMBtu/hr as part of the asphalt plant. This unit has a heat input less than 1.0 MMBtu/hr and is noted here for inventory purposes only.

**Diesel Unit**

<u>Source ID</u>	<u>Max. Capacity</u>	<u>Max. Firing Rate</u>	<u>Power Output</u>
Generator 361	2.1 MMBtu/hr	15 gal/hr	350 hp

**C. Application Classification**

The application for Lane does not include the licensing of increased emissions or the installation of new or modified equipment, therefore the license is considered to be a renewal of current licensed emissions units only.

**II. BEST PRACTICAL TREATMENT**

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent best practical treatment (BPT), as defined in Chapter 100 of the Bureau of Air Quality regulations.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

**A. Asphalt Batch Plant**

The Dryer or Rotary Drum was manufactured in 1971 and is therefore not subject to EPA New Source Performance Standards (NSPS) Subpart I for Hot Mix Asphalt Facilities manufactured after June 11, 1973.

The dryer fires #2 or #4 fuel oil, each with a sulfur content not to exceed 0.5%, and specification waste oil with a sulfur content not to exceed 0.7%. Combined fuel use shall not exceed 500,000 gallons per calendar year.

To meet the requirements of Best Practical Treatment (BPT) for the control of particulate matter (PM) emissions from the asphalt plant dryer shall vent to a baghouse. Opacity from the asphalt batch plant baghouse is limited to no greater than 20% on a 6 minute block average basis, except for no more than 2 six minute block averages in a continuous 3 hour period.

Based on the above hot mix asphalt plant process rate, the average emission rate from the asphalt baghouse shall be limited to 0.03 grs/dscf (5.1 lb/hr).

The performance of the baghouse shall be constantly monitored by either one of the following at all times the dryer is operating:

1. PM detector – when the detector signals excessive PM concentrations in the exhaust stream, Lane shall take corrective action within 24 hours, or immediately if opacity exceeds 20%.
2. Personnel with a current EPA Method 9 visible emissions certification – when the opacity exceeds 20%, the hot mix asphalt plant is operating with insufficient control and corrective action shall be taken immediately.

Fugitive particulate emissions from the asphalt plant shall be controlled so as to prevent visible emissions in excess of 10% opacity on a 6 minute block average basis.

Lane may process up to 10,000 cubic yards per year of soil contaminated by gasoline or #2 fuel oil without prior approval from the Department. This limit may be exceeded with written authorization from the Department.

5,000 of the above 10,000 cubic yards may be soil contaminated with virgin oil as defined by the Bureau of Air Quality without prior approval from the Bureau of Air Quality. Processing of virgin oil contaminated soils may require a solid waste processing facility license under *Maine Solid Waste Management Rules*, 06-096 CMR 409 (last amended June 16, 2006). The material shall be handled in accordance with the requirements of the Bureau of Remediation and Waste Management.

Virgin oil means any petroleum derived oil, including petroleum fuels, unused motor oils, hydraulic fluids, lubrication oils and other industrial oils, that are not characterized as waste oil.

Lane shall not process soils which are classified as hazardous waste or which have unknown contaminants.

**B. Generator #1**

Generator #1 is utilized primarily to provide electrical power. Total fuel use in the diesel unit shall not exceed 40,000 gallons per calendar year of diesel fuel. This unit is used for power generation primarily at the licensed location but is sometimes, but not always, co-located with other portable crushers or asphalt plants. Therefore, the maximum sulfur limit for the diesel fuel is 0.5% due to the fact that it is not always feasible to provide fuel for this unit separate from other off-road equipment on the site.

BPT for the diesel unit is:

1. Chapter 106 regulates fuel sulfur content, however the use of 0.5% sulfur by weight fuel is more stringent and shall be used.
2. PM, PM<sub>10</sub>, NO<sub>x</sub>, CO and VOC emission limits are based upon AP-42 data dated 10/96 for diesel engines smaller than 600 horsepower.
3. Opacity shall not exceed 30% on a six (6) minute block average basis, except for two (2) six (6) minute block averages in a 3-hour period.

**C. Stock Piles and Roadways**

Visible emissions from a fugitive emission source shall not exceed an opacity of 20%, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20% in any one (1) hour.

D. General Process Emissions

Visible emissions from a general process (including conveyor belts) shall not exceed an opacity of 10% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period.

E. Annual Emission

Lane has the following annual emissions, based on:

- Combined fuel use of 500,000 gallons per calendar year #2 fuel oil, (0.5% sulfur by weight maximum), #4 fuel oil (0.5% sulfur by weight maximum) and specification waste oil (0.7% sulfur by weight maximum) in the asphalt plant.
- 40,000 gallons per calendar year #2 fuel oil (0.5% sulfur by weight maximum) in the generator.

**Total Annual Emissions for the Facility**  
(used to calculate the annual license fee)

	<b>PM</b>	<b>PM<sub>10</sub></b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>VOC</b>
Asphalt Plant	2.1	2.1	24.7	4.5	10.6	2.6
Generator #1	0.9	0.9	1.4	12.2	2.6	1.0
<b>Total TPY</b>	<b>3.0</b>	<b>3.0</b>	<b>26.1</b>	<b>16.7</b>	<b>13.2</b>	<b>3.6</b>

**III. AMBIENT AIR QUALITY ANALYSIS**

According to the Maine Regulations Chapter 115, the level of air quality analyses required for a renewal source shall be determined on a case-by-case basis. Based on the total facility emissions, Lane is below the emissions level required for modeling and monitoring.

**ORDER**

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-646-71-E-R subject to the following conditions.

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This

License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

**STANDARD CONDITIONS**

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S.A. §347-C).
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115. [06-096 CMR 115]
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 CMR 115]
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 CMR 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353. [06-096 CMR 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 115]
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 115]
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 CMR 115]
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an

- application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [06-096 CMR 115]
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 CMR 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
- A. perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
    - 1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
    - 2. pursuant to any other requirement of this license to perform stack testing.
  - B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
  - C. submit a written report to the Department within thirty (30) days from date of test completion.
- [06-096 CMR 115]
- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then [06-096 CMR 115]:
- A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
  - B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
  - C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 CMR 115]
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 CMR 115]
- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 CMR 115]

**SPECIFIC CONDITIONS**

**(16) Asphalt Batch Plant**

- A. Emissions from the hot mix asphalt plant shall vent to a baghouse, and all components of the asphalt plant shall be maintained so as to prevent PM leaks. [06-096 CMR 115, BPT]
- B. The performance of the baghouse shall be constantly monitored by either one of the following at all times the dryer is operating [06-096 CMR 115, BPT]:
  - 1. PM detector - when the detector signals excessive PM concentrations in the exhaust stream, Lane shall take corrective action within 24 hours, or immediately if opacity exceeds 20%.
  - 2. Personnel with a current EPA Method 9 visible emissions certification - when the opacity exceeds 20%, the asphalt batch plant is operating with insufficient control and corrective action shall be taken immediately.
- C. To document maintenance of the baghouse, the license shall keep a maintenance log recording the date and location of all bag failures as well as all routine maintenance. The maintenance log shall be kept on-site at the asphalt plant location. [06-096 CMR 115, BPT]
- D. Opacity from the baghouse is limited to no greater than 20% on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. [06-096 CMR 101]

- E. General process emissions from the asphalt plant shall be controlled so as to prevent visible emissions in excess of 20% opacity on a six (6) minute block average basis except for no more than one (1) six (6) minute block average in a 1-hour period. [06-096 CMR 101]
- F. Fuel use records and supplier receipts showing gallons and sulfur content for the asphalt batch plant shall be maintained for at least six years and made available to the Department upon request. A log shall also be maintained recording the quantity and analyzed test results of all specification waste oil fired in the dryer. [06-096 CMR 115, BPT]
- G. Lane shall be limited to a combined fuel use of 500,000 gallons per calendar year of #2 or #4 fuel oil (0.5% sulfur by weight maximum) and specification waste oil (0.7% sulfur by weight maximum). Emissions from the baghouse shall not exceed the following (based on firing 0.7% sulfur oil): [06-096 CMR 115, BPT]

<u>Pollutant</u>	<u>grs/dscf</u>	<u>lb/hr</u>
PM	0.03	5.1
PM <sub>10</sub>	0.03	5.1
SO <sub>2</sub>	-	60.6
NO <sub>x</sub>	-	11.0
CO	-	26.0
VOC	-	6.4

- H. Lane may process up to 10,000 cubic yards per year of soil contaminated by gasoline or #2 fuel oil without prior approval from the Department. This limit may be exceeded with written authorization from the Department. [06-096 CMR 115, BPT]

5,000 of the above 10,000 cubic yards per year may be soil contaminated with virgin oil as defined by the Bureau of Air Quality without prior approval from the Bureau of Air Quality. For the purposes of this license, virgin oil means any petroleum derived oil, including petroleum fuels, unused motor oils, hydraulic fluids, lubrication oils and other industrial oils, that are not characterized as waste oil. Processing of virgin oil contaminated soils may require a solid waste processing facility license under MEDEP Chapter 409. The material shall be handled in accordance with the requirements of the Bureau of Remediation and Waste Management. [06-096 CMR 115, BPT]

- I. Lane shall not process soils which are classified as hazardous waste or which have unknown contaminants. [06-096 CMR 115, BPT]
- J. When processing contaminated soils, Lane shall maintain records which specify the quantity and type of contaminant in the soil as well as the origin and characterization of the contaminated soil. In addition, when processing contaminated soil, Lane shall maintain records of processing temperature,



asphalt feed rates and dryer throughput on an hourly basis. The material shall be handled in accordance with the requirements of the Bureau of Remediation and Waste Management. [06-096 CMR 115, BPT]

- K. Lane shall notify the Bureau of Air Quality regional inspector at least 7 days prior to processing soil contaminated with anything other than #2 fuel oil or gasoline. [06-096 CMR 115, BPT]

(17) **Diesel Unit**

- A. Fuel use records and supplier receipts for the diesel fuel used in unit 855 shall be maintained for at least six years and available to the Department upon request. [06-096 CMR 115, BPT]
- B. Lane shall not exceed the total use of 40,000 gallons per year (12-month rolling total) of diesel fuel with a sulfur content not to exceed 0.5% by weight. Emissions from diesel unit 855 shall be limited to the following: [06-096 CMR 115, BPT]

<u>Pollutant</u>	<u>lb/hr</u>
PM	0.7
PM <sub>10</sub>	0.7
SO <sub>2</sub>	1.1
NO <sub>x</sub>	9.3
CO	2.0
VOC	0.8

- C. Visible emissions from the diesel unit shall not exceed 30% opacity on a six (6) minute block average basis, except for two (2) six (6) minute block averages in a 3-hour period. [06-096 CMR 101]

(16) **Stockpiles and Roadways**

Visible emissions from a fugitive emission source shall not exceed an opacity of 20%, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20% in any one (1) hour. [06-096 CMR 101]

(17) **General Process Sources**

Visible emissions from any general process source shall (including conveyor belts) not exceed an opacity of 10% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period. [06-096 CMR 101 and 06-096 CMR 115, BPT]

(18) **Equipment Relocation** [06-096 CMR 115, BPT]

- A. Lane shall notify the Bureau of Air Quality, by a written notification at least 48 hours prior to relocation of any equipment carried on this license. Written

notice may be sent by mail, facsimile (fax), or e-mail. Notification sent by mail shall be sent to the address below or to a Department Regional Office:

Attn: Relocation Notice  
Maine DEP  
Bureau of Air Quality  
17 State House Station  
Augusta, ME 04333-0017

Equipment relocation notification can also be done on-line with e-notice at [www.maine.gov/dep/air/compliance/forms/relocation](http://www.maine.gov/dep/air/compliance/forms/relocation).

The notification shall include the address of the equipment's new location, an identification of the equipment and the license number pertaining to the relocated equipment.

- B. Written notification shall also be made to the municipality where the equipment will be relocated, except in the case of an unorganized territory where notification will be made to the respective county commissioners.
- (19) Lane shall keep a copy of this Order on site, and have the operator(s) be familiar with the terms of this Order. [06-096 CMR 115, BPT]
- (20) Lane shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard [38 M.R.S.A. §605-C].

DONE AND DATED IN AUGUSTA, MAINE THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 2007.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: \_\_\_\_\_  
DAVID P. LITTELL, COMMISSIONER

**The term of this license shall be five (5) years from the signature date above.**

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: July 25, 2007

Date of application acceptance: July 25, 2007

Date filed with the Board of Environmental Protection \_\_\_\_\_

This order prepared by Mark E. Roberts, Bureau of Air Quality